Introduction

The following report was prepared by Monte R. Lee and Company, for Pioneer Telephone Cooperative, Inc. (hereinafter referred to as "Pioneer") which has an A-Block Lower 700 MHz License in the Western Oklahoma BEA (BEA 126). The A-Block License was issued on June 26, 2008 and Pioneer was assigned Call Sign WQIZ606. This report will demonstrate that Pioneer is in compliance with the construction requirement of 47 C.F.R. 27.14(g). The FCC rule states that all WCS licensees holding EA authorizations for Block A must serve with a signal level sufficient to cover at least 35% of the geographic area of their license authorization no later than June 13, 20013 and at least 70% by the end of the license term. The proceeding sections and coverage map will confirm that Pioneer is in full compliance with the buildout requirement of providing adequate coverage to 35% of the Western Oklahoma BEA (BEA 126). It will also be shown that Pioneer has provided adequate coverage to BEA 126 to satisfy the 70% requirement.

Engineering Methodology

According to Title 47 CFR Section 27.14(g):

> "WCS licensees holding EA authorizations for Block A in the 698-704 MHz and 728-734 MHz bands, cellular market authorizations for Block B in the 704-710 MHz and 734-740 MHz bands, or EA authorizations for Block E in the 722-728 MHz band, if the results of the first auction in which licensees for such authorizations are offered satisfy the reserve price for the applicable block, shall

provide service over at least 35 percent of the geographical area of each of their license authorizations no later than June 13, 2013 (or within four years of initial license grant if the initial authorization in a market is granted after June 13, 2009), and shall provide such service over at least 70 percent of the geographical area of each of these authorizations by the end of the license term."

Since Pioneer is deploying a fixed broadband data network using UMTS technology in the Western Oklahoma BEA (BEA 126) on A Block Pioneer adequate coverage is defined as a signal strength of –108 dBm at the antenna terminals of the fixed wireless CPE. This is the lowest signal level for which broadband wireless data service can be provided.

In order to generate a contour based on this signal level, the Longley-Rice v1.2.2 propagation model will be used. This is a model for use in the 30-20,000 MHz range and is incorporated as an option in the EDX SignalPro propagation prediction tool which will be used to run this coverage contour. In addition, 30 meter resolution terrain data and USGS Land Use and land Cover data will also be included. Time and location variability statistics will each be set at 95%.

Once this coverage contour is generated, it is overlaid onto a map of the BEA 126 market area resulting in a plot showing the total area covered.

Geographical Area Coverage

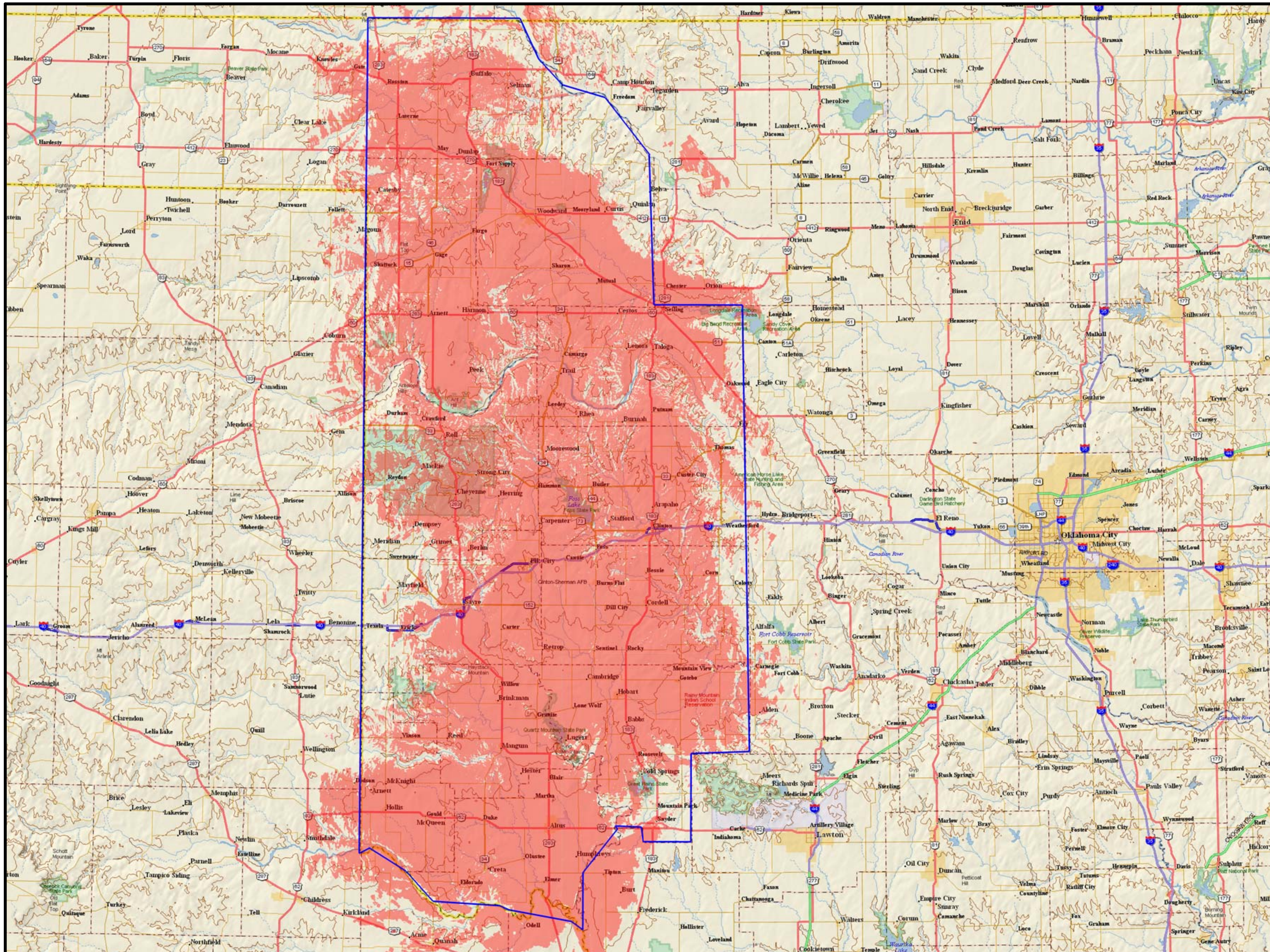
The EDX software has the ability to calculate the total area under the coverage contour. This area divided by the total market area gives the percent coverage within the BEA 126 Market.

The results are tabulated as follows:

BEA 126 Market Area	Total Coverage Area
11,599 sq. mi.	**9,053 sq. mi.**

Conclusion

The attached map and the engineering methodology explained in this report demonstrate that Pioneer is in full compliance with the first (35%) as well as the final (70%) buildout requirement for the Western Oklahoma BEA (BEA 126) for the Lower 700 MHz A Block. The attached map and the figures tabulated above demonstrate that Pioneer is currently providing at least –108 dBm coverage to 78.0 % of the BEA 126 market area.



EDX® SignalPro®: 700 MHz Wireless

Prop. model 1: Longley-Rice v1.2.2
Time: 95.0% Loc.: 95.0%
Prediction Confidence Margin: 0.0dB
Climate: Continental Temperate
Land use (clutter): USGS-EDX format (.151 files)
Atmospheric Abs.: none
K Factor: 1.333

BEA 126

Received Power at remote

>= -108.0 dBmW
< -108.0 dBmW

Display threshold level: -108.0 dBmW
RX Antenna - Type: ISOTROPIC
Height: 10.0 ft AGL Gain: -2.15 dBd

Notes

Existing Coverage

Area BTA 126 = 11,599 sq. miles
Area Coverage =9,053 sq. miles
Percent Coverage = 9,053 / 11,599 = 78.0%

MILES

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BEA 126 Market Coverage

Monte R. Lee & Co. 12/17/12